

Concrex® Carbon Fibre

Permanent granite-hard repairs where ordinary mortars fail

New Watco Concrex Carbon Fibre is the ultimate floor repair mortar. The addition of carbon fibre makes this the strongest, longest lasting floor repair mortar that you can buy. The unique formulation also includes a rapid setting curing agent for even faster repairs and Novolac resin for superior chemical resistance - cement based repair mortars have no resistance to acidity.

Abrasion resistance is greatly enhanced by the addition of a ceramic additive. Compared with other repair mortars this formulation is particularly rich in epoxy resin. This provides superior strength and adhesion, making it ideal for very thin section, feather-edge or intricate repairs. The new rapid cure formulation keeps downtime to a minimum in busy areas, with light traffic possible in as little as an hour. Use in heavy wear areas where other repair mortars would fail - make your floor repairs permanent with Watco Concrex Carbon Fibre.



Where to use Watco Concrex® Carbon Fibre







Worn floors



Holed floors



Fitting guide rails



Different levels





Areas of use:

- · Holes in concrete floors
- · Damaged steps
- · Broken floor joints
- · Eroded, uneven concrete

Features:

- Epoxy resin reinforced with carbon fibre and ceramic
- Virtually indestructible
- Rapid curing ready for light traffic in as little as an hour
- Excellent chemical resistance
- · Resin rich for thin section and featheredge repairs
- · Anti slip
- Non-dusting
- · Incredibly versatile

For more great products in the Concrex® range click here



Spalled expansion joints

Need help? Speak to the experts

Our dedicated and professional team are here to help you get the best results for your project. They will talk you through the preparation and application stages when using Concrex® Carbon Fibre.

Call our expert team on: 01483 418 418 (Weekdays 8:00am - 5:30pm. Saturday 9:00am - 12:00pm)















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1 Surface Preparation

Surfaces should be clean, dry and free of all loose material. Wire brushing or sweeping is generally sufficient. Watco Bio-D degreaser can be used to remove grease and oil. If the surface is damp, it can be primed with Watco Tack Coat.

2 Priming

The resin content of Watco Concrex Carbon Fibre is very high. This means that a primer is not usually required when filling holes in concrete floors or resurfacing rough or damaged concrete. Watco Tack Coat adhesive primer is recommended when using Concrex Carbon Fibre as a thin section screed over smooth surfaces. It is also recommended when repairing intricate/high impact areas such as broken floor joint edges and damaged step nosings.

3 Mixing

Wear protective gloves.

The resin and the sand are already pre-blended and is supplied with bottles of curing agent, 4 x 100ml in the 10kg pack and 2 x 500ml in the 25kg pack.

Empty the bottles of curing agent onto the sand/resin



Mix thoroughly using a trowel (or by hand – it's easier)



Trowel firmly into the repair



Wipe the trowel with white spirit to get a good finish



4 Application

Trowel the mortar firmly into the repair and finish with a trowel or float. To get a good and smooth finish, regularly wipe the surface of the trowel with a cloth dampened with white spirit. Watco Concrex Carbon Fibre is normally applied at 5mm - 50mm thick but repairs can be feather edged if most of the repair is at least 5mm thick. The curing agent is added to the sand/resin at point of use. Once mixed the mortar should be used within 15 - 30 minutes depending upon temperature.

If the entire pack of Watco Concrex Carbon Fibre cannot be used within 30 minutes, it can be part mixed. To split a pack carefully halve the sand/resin (ideally measured by weight) and use half the number of curing agent bottles. Do not mix inside the plastic bucket. Tip the sand/resin into a mixing tray or on a board. Shake the bottles of curing agent thoroughly until the liquid is a uniform grey. Form the sand/resin into a mound and leave a small hole in the middle. Empty the curing agent into the hole, ensuring the bottles are completely drained.

For repairs deeper than 50mm, apply in separate layers allowing 6 - 8 hours between layers or use Concrex Deep Fill which can be applied at 15mm - 100mm thick in one layer. Carefully mix the aggregate with the curing agent using a trowel until a smooth mortar is obtained; this will take several minutes. The more thorough the mixing, the 'wetter', smoother and more manageable the mix becomes. Alternatively, you can knead the mixture by hand wearing suitable gloves. It is important to mix thoroughly until you achieve a consistent colour. A 'Cretangle' or suitable open pan mixer can be used to mix large quantities.



Material Safety Data Sheets are available.



Concrex® Carbon Fibre

Specification	
Composition	Finely graded sand pre-blended with resin. A 10kg unit includes 4×100 ml bottles of curing agent, a 25kg includes 2×500 ml bottles.
Colour	Mid grey.
Priming	See 'Priming' on p.2
Usage Interior/Exterior	Interior & exterior.
Working Life	15 - 30 minutes depending upon temperature.
Application Tools	Steel float or trowel.
Suitable For	Concrete, sand & cement and metal.
Pack Sizes	10kg, 25kg.
Coverage	10kg – 1.2m² at 5mm thick. 25kg - 3m² at 5mm thick.
Shrinkage (on cure)	Negligible.
Damaged by Frost	No.
Can be Feather-edged	Yes, around the edge of a repair – full strength at 5mm thick.
Application Thickness	Up to 50mm for hole filling only. Do not use at more than 15mm for screeding. Use Watco Concrex Deep Fill finishing with a 5mm layer of Concrex Carbon Fibre instead.
Cleaning Tools	Use white spirit before Concrex Carbon Fibre cures.
Shelf Life	12 months in unopened container.
Storage	Between 10°C - 30°C. Do not allow to freeze.
Chemical Resistance	Excellent resistance to spillages of many chemicals commonly used in industry (at 20°C), including paraffin, petrol, fuel oils, alcohols, dilute nitric, sulphuric and hydrochloric acids, sugar solutions, oxalic acid, citric acid, caustic soda, salt solutions, cutting oils, mineral oils. Advice given regarding other chemicals.
Principal Limitations Please contact us regarding applications not described here.	Do not apply to wet surfaces. Watco Tack Coat should be used for application to damp surfaces before applying Watco Concrex Carbon Fibre. Do not apply thicker than 50mm in one layer – see section headed 'Application'. Watco Concrex Carbon Fibre should not be subjected to temperatures above 60°C.

Curing Times (at 15°C-20°C)				
Curing Times	Light Traffic	Heavy Traffic		
Curing time will be extended by lower temperatures. Do not use below 10°C (see Watco Concrex Cold Set).	1 hour	4 hours		

Strength

Concrex is far stronger than concrete. The table shows a comparison (typical figures).

	Tensile Strength	Flexural Strength	Compressive Strength
Watco Concrex®	15.4 MN/m ²	55.9 MN/m ²	55.2 MN/m ²
Concrete	3.4 MN/m ²	6.9 MN/m ²	21.41 MN/m ²